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APPENDIX D
EXAMPLES OF DRILLING LOGS

D-1. General. This appendix contains seven examples of drilling logs, five for overburden drilling and two for rock coring. These logs conform to the guidance presented in EM 1110-1-1806, "Presenting Subsurface Information in Contract Plans and Specifications," and in Chapter 4 of this manual. The examples are not meant to cover all possible subsurface conditions which may be encountered during field investigation, but are presented to give direction to the minimum acceptable input to completing drilling logs for the most common drilling activities.

D-2. Preparation of Drilling Logs. Drilling logs will be made of each boring. A similar log will be prepared for each excavation which is constructed for the purpose of characterizing subsurface materials and geologic conditions. The only approved drilling log form for borings is ENG FORM 1836 (March 1971). This form may be used as a continuation sheet or, at the option of the user, ENG FORM 1836-A (June 1967) may be used. All logs will be filled out in the inspector's own handwriting.

a. Scale. A scale of 1 in. equals 2 ft or larger will be used. A smaller scale may be used where, for example, the boring is advanced without sampling or logging, the upper portion of the log would represent water, or the boring was made to identify some geologic horizon such as top of rock. Other similar exceptions would be allowable.

b. Heading. All logs will have the pertinent division, installation, hole number, project identification, and page number entered on all log sheets. Items 1 through 19, ENG FORM 1836 will be completed to the fullest extent possible as indicated in the seven examples. Boring numbers will be consecutive for each project. The boring numbers will be proceeded by letter symbols which will identify the method of drilling. These letters are as follows:

- A - Auger (Hand or Power)
- C - Core
- D - Drive
- P - Probe
- T - Test Pit
- U - Undisturbed (Hydraulic or Rotary)

Additional letters and numbers for boring identification may be used at the user's discretion. Inclusion of the graphic soil symbol in column c is optional.

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c. Examples. The drilling log examples, Figures D-1 through D-7, are described as follows:

Figure D-1: Overburden, disturbed, standard penetration test and auger.

Figure D-2: Overburden, disturbed, drive.

Figure D-3: Overburden, disturbed, auger.

Figure D-4: Overburden, undisturbed, Denison.

Figure D-5: Overburden, undisturbed, Shelby and auger.

Figure D-6: Bedrock, disturbed, SPT and core.

Figure D-7: Bedrock, core.

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DRILLING LOG		DIVISION	INSTALLATION	Hole No.		
1. PROJECT Raymond AFB, SC. Airmens Dorm		SAD	SAS	AD-6		
2. LOCATION (Coordinates or Station) See Remarks				SHEET 1 OF 2 SHEETS		
3. DRILLING AGENCY SAS						
4. HOLE NO. (As shown on drawing title and file number) AD-6			10. SIZE AND TYPE OF BIT 1 1/2" I.D. Split spoon			
5. NAME OF DRILLER S. Long			11. DATUM FOR ELEVATION SHOWN (TBM or MSL) MSL (NGVD)			
6. DIRECTION OF HOLE <input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.			12. MANUFACTURER'S DESIGNATION OF DRILL Failing 3/4			
7. THICKNESS OF OVERBURDEN 30.0			13. TOTAL NO. OF OVERBURENDED BURDEN SAMPLES TAKEN 26 Jars			
8. DEPTH DRILLED INTO ROCK 0			14. TOTAL NUMBER CORE BOXES -			
9. TOTAL DEPTH OF HOLE 30.0			15. ELEVATION GROUND WATER 17.5			
			16. DATE HOLE STARTED 3 Apr 81	COMPLETED 4 Apr 81		
			17. ELEVATION TOP OF HOLE 25.5			
			18. TOTAL CORE RECOVERY FOR BORING N/A			
			19. SIGNATURE OF INSPECTOR Candy Watson			
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOV. ENCL.	BOR-OP. SAMPLE NO.	REMARKS (Drilling time, water loss, depth of overburden, etc.)
	a	b	c			3rd Hole Test CLOWS
23.0	2		(SM) Brown, Silty SAND Roots In Top 6".	NS	1	NS = No Sample
19.9	4		(SP-SM) Light Brown, Poorly Graded, Silty SAND, Medium To Fine, Traces Of Shell, Moist.	1	2	
EL 17.5 4/4/81	6		(SP) Light Brown, Poorly Graded SAND, Fine w/ Traces Of Shell.	2	3	
15.5	8		Light Gray	3	4	
14.5	10		(OL) Dark Gray To Black, Organic SILT, Trace Sand, Strong Odor.	4	5	Barracks A
12.5	12		(OH) Black, Organic SILT, Lenses Of Clay, Strong Odor, Peaty.	5	6	10'
11.1	14		(SM) Dark Gray, Silty SAND, Medium To Fine.	6	7	70' From Curb
7.0	16		(SP) Light Brown, Poorly Graded SAND, Fine.	8	8	LOCATION PLAN
	18			9	9	
	20		(SP) Light Gray, Poorly Graded SAND, Medium To Coarse.	10	10	
				11	11	
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				13	13	
				14	14	
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DRILLING LOG		DIVISION	SAD	INSTALLATION	SAS	SHEET 2 OF 2 SHEETS	
1. PROJECT		Raymond AFB, Airmens Dorm		10. SIZE AND TYPE OF BIT			
2. LOCATION (Coordinates or Station)				11. DAYUM FOR ELEVATION SHOWN (FTM or MSL)			
3. DRILLING AGENCY				12. MANUFACTURER'S DESIGNATION OF DRILL			
4. HOLE NO. (As shown on drawing title and file number)		AD-6		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN		DISTURBED	UNDISTURBED
5. NAME OF DRILLER				14. TOTAL NUMBER CORE BOXES			
6. DIRECTION OF HOLE		<input type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG FROM VERT.		15. ELEVATION GROUND WATER			
7. THICKNESS OF OVERBURDEN				16. DATE HOLE STARTED		COMPLETED	
8. DEPTH DRILLED INTO ROCK				17. ELEVATION TOP OF HOLE		25.5	
9. TOTAL DEPTH OF HOLE				18. TOTAL CORE RECOVERY FOR BORING			
				19. SIGNATURE OF INSPECTOR		Cindy Watson	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	1. CORE RECOVERY	2. CORE SAMPLE NO.	REMARKS (Drilling time, weather, loss, depth of weathering, etc., if significant)	
0		c	(SP) Light Gray, Poorly Graded SAND, Medium To Coarse.		19	15	
					NS	19	
					20	6	
22					NS	20	
					21	25	
2.0					22	10	
1.0			Gravelly		NS	20	
					23	25	
			(CL) Brownish Gray, Sandy CLAY, Stiff To Hard, Shelly, Moist.		NS	11	
26					24	15	
					NS	30	
28					25	10	
					NS	18	
-4.5					26	32	
30			Bottom Of Boring			11	
						15	
						26	
						8	
						21	
						50	

Figure D-1. (Concluded)

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DRILLING LOG		DIVISION	Missouri River	INSTALLATION	Kansas City	SHEET 1 OF 5 SHEETS
1. PROJECT	Grove Dam			10. SIZE AND TYPE OF BIT	3" Ø Drive Barrell	
2. LOCATION (Coordinates or Station)	42+00 on E			11. DATUM FOR ELEVATION SHOWN (TBM or NSL)	NGVD	
3. DRILLING AGENCY	Kansas City Dist.			12. MANUFACTURER'S DESIGNATION OF DRILL	Walker Neer Cable Tool	
4. HOLE NO. (As shown on drawing title and file number)	D-18			13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN	48 Jars	DISTURBED UNDISTURBED
5. NAME OF DRILLER	C Brown			14. TOTAL NUMBER CORE BOXES		
6. DIRECTION OF HOLE	(VERTICAL <input checked="" type="checkbox"/> INCLINED <input type="checkbox"/> DEG. FROM VERT.)			15. ELEVATION GROUND WATER	698.0	
7. THICKNESS OF OVERBURDEN	95.0			16. DATE HOLE	STARTED 6 Jan 78	COMPLETED 12 Jan 78
8. DEPTH DRILLED INTO ROCK	0			17. ELEVATION TOP OF HOLE	715.0	
9. TOTAL DEPTH OF HOLE	95.0 (EI 6200)			18. TOTAL CORE RECOVERY FOR BORING	N/A	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	SCORE RECOVERY %	WORKER SAMPLE NO.	REMARKS (Drilling time, sample size, depth of weathering, etc., if significant)
a	b	c	d	e	f	g
714.0			Asphalt and Base Course			
	2		(CL) Tan, Lean CLAY, Enbankment Fill		1	Rec 2.0 15 Blows
	4				2	Rec 2.0 16 Blows
	6				3	Rec 2.0 14 Blows
	8				4	Rec 2.0 18 Blows
	10				5	Rec 2.0 20 Blows
	12				6	Rec 1.9 Loss 0.1 14 Blows
701.0	14		Slightly Sandy		7	Rec 2.0 18 Blows
	16				8	Rec 2.0 Ream to 16.0' 22 Blows
698.0 ±	18		Static Water Level After Completion Of Boring.		9	Rec 1.9 Loss 0.1 21 Blows
12 Jan 78	20				10	Rec 2.0 23 Blows
ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAR 71 (TRANSLUCENT)				PROJECT	HOLE NO. D-18	

Figure D-2. Example drilling log (partial) for drive boring in overburden with disturbed sampling

EM 1110-1-1804
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Hole No. A-30

DRILLING LOG		DIVISION	SWD	INSTALLATION	SWT	SHEET 1 OF 1 SHEETS	
1. PROJECT		SR 9 Road Relocation Eufaula Lake		10. SIZE AND TYPE OF BIT		4 in Square Auger	
2. LOCATION (Coordinates or Station)		Station 4+50, 50' RT.		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)		NGVD	
3. DRILLING AGENCY		Tulsa Dist.		12. MANUFACTURER'S DESIGNATION OF DRILL		CME-1200	
4. HOLE NO. (As shown on drawing title and file number)		A-30		13. TOTAL NO. OF OVER- BURDEN SAMPLES TAKEN		DISTURBED	UNDISTURBED
5. NAME OF DRILLER		A. Jones		14. TOTAL NUMBER CORE BOXES		-	
6. DIRECTION OF HOLE		<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	DEG. FROM VERT.	15. ELEVATION GROUND WATER		Not Encountered	
7. THICKNESS OF OVERTURDEN		B.2		16. DATE HOLE		STARTED 8-29-82	COMPLETED 8-29-82
8. DEPTH DRILLED INTO ROCK		-		17. ELEVATION TOP OF HOLE		816.2	
9. TOTAL DEPTH OF HOLE		B.2 (El 808.0)		18. TOTAL CORE RECOVERY FOR BORING		-	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	BORING SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)	
a	b	c	d	e	f	g	
			(CL) Brown, Sandy Lean CLAY, Moist		Jar 1	Drilled With 4in. Square Auger. No Free Water Encountered Refusal to Auger At 8.2', Hydraulic Pressure 100 PSI With No Penetration For 2 Min. At Refusal. Dilled 0-8' In 4 Min. Drill rate 2 1/2 Min. Drill Action Smooth At 100 RPM	
813.2	3		(ML) Tan, Clayey, SILT, Slightly Plastic		Jar 2		
	4						
	5		Micaceous, Slightly Damp				
	6						
	7						
808.0	8		Refusal To Auger @ 8.2'				
	9						

ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE
MAR 71 (TRANSLUCENT)

PROJECT SR9 Road Relocation Eufaula Lake HOLE NO. A-30

Figure D-3. Example drilling log for auger boring in overburden with disturbed samples

DRILLING LOG		DIVISION	SAD	INSTALLATION	SAS	Hole No.	U-1	SHEET / OF 1 SHEETS
1. PROJECT	Richard B. Russell Dam							
2. LOCATION (Coordinates or Station)	X 312,457 Y 123,456							
3. DRILLING AGENCY	SAS							
4. HOLE NO. (As shown on drawing title and file number)	U-1							
5. NAME OF DRILLER	J. Smith							
6. DIRECTION OF HOLE	<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED DEG. FROM VERT.							
7. THICKNESS OF OVERBURDEN	36.2							
8. DEPTH DRILLED INTO ROCK	0							
9. TOTAL DEPTH OF HOLE	36.2 (EI 340.3)							
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	SCORING REGULAR	BORER SAMPLE NO.	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)		
				HAND PENE TSF				
	5		(ML) Reddish Brown, Slightly Clayey, SILT.	0.6	1	Fish Tailed To 2'. Drilled With 6 in. Denison Barrel With Inner Barrel Protruding 1 in.		
	10			0.5	2	100% Recovery Except As Noted. Hand Penetrometer Made On Bottom Of Each Sample.		
	15			0.5	3	No Changes In Drill Mud To Indicate Free Water.		
	20			0.6	4	#6 Ran 2.0 Rec 1.6		
	25			0.4	5	#10 Ran 2.0 Rec 1.8		
	30		Red, Slightly Sandy	0.5	6	#11 Ran 2.0 Rec 1.6		
	35			0.6	7	#14 Ran 2.0 Rec 1.2		
	340.3		Bottom Of Hole	0.7	9	Refusal At 36.2' No Recovery 36.0'-36.2'		
				0.8	12			
				0.9	13			
				0.8	14			
				0.9	15			
				1.0	16			
				0.9	17			
ENG FORM 1836 MAR 71		PREVIOUS EDITIONS ARE OBSOLETE TRANSMITTERS		PROJECT	Richard B. Russell Dam		HOLE NO.	U-1

Figure D-4. Example drilling log for Denison sample boring in overburden

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DRILLING LOG		DIVISION	INSTALLATION	Hole No.	SHEET / OF 1 SHEETS
		ORD	Huntington	AU-3	
1. PROJECT		10. SIZE AND TYPE OF BIT 6 in Auger & 5 in Shelby			
Alum Creek Dam, Ohio		11. DATUM FOR ELEVATION (SHOWN ITIN. OR H.S.L.)			
2. LOCATION (Coordinates or Station) STA. 2+500 S. 0°S of E		12. MANUFACTURER'S DESIGNATION OF DRILL NGVD			
3. DRILLING AGENCY ORH		13. TOTAL NO. OF OVER-BURDEN SAMPLES TAKEN DISTURBED UNDISTURBED			
4. HOLE NO. (As shown on drawing title and file number)		14. TOTAL NUMBER CORE BOXES AU-3			
5. NAME OF DRILLER C. Black		15. ELEVATION GROUND WATER Not Encountered			
6. DIRECTION OF HOLE VERTICAL <input checked="" type="checkbox"/> INCL. deg. DEG. FROM VERT.		16. DATE HOLE STARTED COMPLETED 6 May 1981 6 May 1981			
7. THICKNESS OF OVERBURDEN		17. ELEVATION TOP OF HOLE 952.4			
8. DEPTH DRILLED INTO ROCK		18. TOTAL CORE RECOVERY FOR BORING N/A			
9. TOTAL DEPTH OF HOLE 22.0 (E.I. 930.4)		19. SIGNATURE OF INSPECTOR William Boyd			
ELEVATION DEPTH LEGEND		CLASSIFICATION OF MATERIALS (Description)		RE-CORE RECOVERY %	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant)
a	b	c	d	*	
				Hand Penet.	Augered w/ 6 in. Helical Auger To 6, 10, And 20 Feet. Where 5 in. Shelby Tubes Were Pushed 24 in.
				1.0 TSF U-1	Hand Penetrometer Taken On Lower End Of Each Sample
				1.6 TSF U-2	Push 1 Ran 24" Rec 24"
					Push 2 Ran 24" Rec 24"
					Push 3 Ran 24" Rec 24"
5					
10					
15					
20					
930.4			Bottom Of Boring	2.0 TSF U-3	24.0'
ENG FORM 1836 PREVIOUS EDITIONS ARE OBSOLETE MAY 1971 TRANS. ENT. PROJECT HOLE NO. Alum Creek Dam, Ohio AU-3					

Figure D-5. Example drilling log for auger boring in overburden with Shelby tube sampling

DRILLING LOG		DIVISION	INSTALLATION		Hole No.
1. PROJECT	South Pacific		Los Angeles		DC-4
2. LOCATION (Coordinates or Station)			10. SIZE AND TYPE OF BIT		SHEET 1 OF 42 SHEETS
See Remarks		Diamond NWM 5 1/2" ID SS.		11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	
3. DRILLING AGENCY	Mott Drilling Co		MSL		12. MANUFACTURER'S DESIGNATION OF DRILL
4. HOLE NO. (As shown on drawing title and file number)	DC-4		Sullivan - 180		13. TOTAL NO. OF OVER BURDEN SAMPLES TAKEN
5. NAME OF DRILLER	Horton		14. TOTAL NUMBER CORE BOXES		4
6. DIRECTION OF HOLE	<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	DEG. FROM VERT.	15. ELEVATION GROUND WATER		See Remarks
7. THICKNESS OF OVERBURDEN	5.0 (575.0)		16. DATE HOLE		STARTED 2/18/79 COMPLETED 3/18/79
8. DEPTH DRILLED INTO ROCK	100.0		17. ELEVATION TOP OF HOLE		575.0
9. TOTAL DEPTH OF HOLE	475.0		18. TOTAL CORE RECOVERY FOR BORING		99.4 / 99.5
19. SIGNATURE OF INSPECTOR Jim Jones					
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOVERY	REMARKS (Drilling time, water loss, depth of std. Pore, Test Blanks)
573.5	1		(CL) Brown, Sandy CLAY, Roots In Top 6", Moist	1	Brown's Store Hwy 36 Aprox 3500' C-4
	2		(SC) Brown, Clayey, SAND, Fine To Medium, Moist	2	Drl w/ 1 1/4 x 4 1/2" Roller Rock Bit w/ Water Begin 1300 End 1350
	3			3	Ran 5.0' Set 5.3' of 4" Black Iron Pipe 1 w/ Saw Tooth End To 5.0'
570.5	4				11
570.0	5		Rock Fraggs TR	4	Ref At 5.0' 50
	6		SANDSTONE - Miss Bdd, SI, Mic, Med Hd To Hd, F To Med Gra, Lt Gr To Lt Br, Occ Blk Sh Ptgs, Num Hem Ptgs upper 3' Of Core	Box Rec 84%	Drl w/ 11.7 (10.3) N XM B.t # 1234 (V. Good) Shell # 5678 (New)
	7		So To Med Hd, Vf, 0.6 LC	of 10	Pull 1 Drl Tools 21.1' WL 7.6' @ 1640
	8		So, St Red	Boxes	Began 1615 End 1635 Drl Time 20 Min Ran 5.2 Rec 3.8 Loss 1.4 U.L. 0.6
	9		Op. 1/2 Jt, 55°	R.D. 79%	Water Pressure 50 psi Drl Action - Smooth 100% D.W.R - 100% CD 9.4' Tape R.D. $\frac{3.5}{9.4} = 0.7990$
	10				
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PROJECT			HOLE NO.		
Prado Dam, Ca.			DC-4		

Figure D-6. Example drilling log for core boring into bedrock with SPT, disturbed samples and rock cores (Continued)

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DRILLING LOG (Cont Sheet)			ELEVATION TOP OF HOLE 575.0	Hole No. DC-4		
PROJECT PRADO DAM, CA.			INSTALLATION Los Angeles	SHEET 2 OF 42 SHEETS		
ELEVATION a	DEPTH b	LEGEND c	CLASSIFICATION OF MATERIALS (Description) d	% CORE RECOV. e	BOX OR SAMPLE NO. f	REMARKS (Drilling time, water loss, depth of weathering, etc., if significant) g
11			SANDSTONE (Cond. As Above)			Pull 2 Drill Tools 31.7' WL 82' @ 1800 Begin 1645 End 1745 Drill Time 1 hr. Ran 10.0' Rec 10.0' Loss 0.0' U.L. 0.8'
12			- OP, 1/4 Jt, 15° St. Red	Rec 93%	Box 1	Water Pressure 50psi Drl Action - Smooth 100% DWR-br
13			Cav. Op, 0.6' U.L. No DWL	RQD 93%	10 Boxes	RQD $\frac{10.0}{10.8} = 93\%$ Rod Drop 13.0 to 13.6 No DWL, No Change In Color of DWR
14						
15						
16			- OP, Hor. Jt., Smooth			
17					17.0	
18					Box 2 of 10 Boxes	
19			- 0.2' U.L., Spins Prob. Ground During Drilling			CD TAPE 20.2 20.2
20						Pull 3 (Cond. On Next Page)
21			Num. Fracs. St. Red 0.3' C.L.			
22						

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PROJECT PRADO DAM, CA.

HOLE NO. DC-4

Figure D-6. (Concluded)

DRILLING LOG		DIVISION	INSTALLATION	Hole No.	
1. PROJECT	Ohio River		Louisville	O-18	
2. LOCATION (Coordinates or Station)	Taylorsville Dam		10. SIZE AND TYPE OF BIT	Dia. NWM	
X: 137,187 F Y: 26,867 F			11. DATUM FOR ELEVATION SHOWN (TBM or MSL)	MSL	
3. DRILLING AGENCY	Louisville District		12. MANUFACTURER'S DESIGNATION OF DRILL	Fairling 314	
4. HOLE NO. (As shown on drawing title and file number)	C-18		13. TOTAL NO. OF OVER- DISTURBED BURDEN SAMPLES TAKEN	—	
5. NAME OF DRILLER	A. Brown		14. TOTAL NUMBER CORE BOXES	4	
6. DIRECTION OF HOLE	<input checked="" type="checkbox"/> VERTICAL <input type="checkbox"/> INCLINED	DEG. FROM VERT.	15. ELEVATION GROUND WATER	606.5	
7. THICKNESS OF OVERBURDEN	0		16. DATE HOLE STARTED	11 Aug 76	
8. DEPTH DRILLED INTO ROCK	33.5		17. DATE HOLE COMPLETED	16 Aug 76	
9. TOTAL DEPTH OF HOLE	33.5' (EL 592.0)		18. ELEVATION TOP OF HOLE	625.5	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)		
			% CORE RECOVERY	BOX OR BAG NO.	
6	8	C			
				REMARKS	
				(Drill time, water loss, depth of weathering, etc., if significant)	
1		LIMESTONE, Silty, Hard Slightly Weathered To Unweathered, Finely Crystalline, Massively Bedded, Moderately Jointed w/ Tight, Smooth bedding Plane Joints Dipping 5°, Gray, Vuggy. Moderately Weathered, Tan	Rec 100%	Box 1 of 4 Boxes	Bit # 1234 - New Shoe # 456 - Used, Good 5.0' Burrell Pull 1 0-9.5' Ran 4.5 Rec 4.5 Loss 0.0
2		Tight High Angle Joints	RQD 100%		Drl. Action Smooth Water Return - 100% Lt. Gray Hyd Press. 100 psi Drill Time 32 min.
3					RQD 4.5' = 100
4					CD 4.5 4.5
5		Horizontal Joint, Rough Slightly Open	Rec 91%		Pull 2 4.5-9.5
6		Dark Gray, very Silty	RQD 85%		Ran 5.0 Rec 4.2 Loss 0.8 U.L. 0.4
7		Shattered, Stained Red-Brown, Trace Of Red Clay, 0.4' U.L.			Drl Action Rough 7.0'-7.7' Water Return 100% Reddish Brown 7.0'-9.5' Drill Time 48 min Hyd Press. 150 psi
8					RQD $\frac{3'11"}{4'7"} = 85\%$
9		90° Joint, Tight, Smooth	9.1'		CD Tape 9.1
10					9.5

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PROJECT Taylorsville Dam HOLE NO C-18

Figure D-7. Example drilling log for core boring in bedrock (sheet 1 of 3)

DRILLING LOG (Cont Sheet)			ELEVATION TOP OF HOLE 625.5	Hole No. C-18	
PROJECT	Taylorsville Dam		INSTALLATION	Louisville	
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS (Description)	% CORE RECOV.	BOX OR SAMPLE NO.
a	b	c	d	e	f
	10		LIMESTONE (Cont.)		
	11		Numerous Vugs	Rec 100%	Box 2 of 4 Boxes
	12		Horizontal Open Joints	RQD 71%	
	13		Core Badly Broken Numerous Closely Spaced High Angle And Horizontal Joints		
	14		Low Angle (10°) Irregular Joint, Tight 45° Joint, Tight 45° Joint, Slightly Open		
	15			Rec 100%	
	16			RQD 85%	
	17				
	18		Irregular, Horizontal Joint, Tight	18.0	CD TAPE 18.5
306.4	19		100% Drill Water Loss	Box 3 of 4 Boxes	19.0
304.3	20		Open Cavity, Tools Dropped Freely	RQD 53%	
	21		Stained Brown		
	22				

PULL 3
95 - 140
Ran 4.5
Rec 4.9
Gain 0.4
Drl. Action Smooth
Water Ret. 100% Gray
Drl. Time 62 min.
Hyd. Press 150 psi
RQD $\frac{3'6"}{4'11"} = 71\%$

CD 140 14.0
PULL 4
14.0 - 19.0
Ran 5.0
Rec 4.5
Loss 0.5
U.L. 0.0
Drl. Action Smooth
Water Ret. 100% Gray
Drl. Time 75 min.
Hyd. Press 150 psi
RQD $\frac{3'9"}{4'5"} = 85\%$

CD TAPE 18.5

PULL 5
19.0 - 25.5
Ran 6.5
Rec 4.0
Loss 2.5
U.L. 2.6
Drl. Action - Rough
100% W.L. At 19.1
Drl. Time 40 min.
Hyd. Press 150 psi

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Figure D-7. (Sheet 2 of 3)

DRILLING LOG (Cont Sheet)			ELEVATION TOP OF HOLE	625 5	Hole No.	C-18
PROJECT	Taylorsville Dam	INSTALLATION	Louisville		SHEET	3 OF 3 SHEETS
ELEVATION	DEPTH	LEGEND	CLASSIFICATION OF MATERIALS	% CORE RECOV.	BOX OR SAMPLE NO.	REMARKS
			(Description)			(Drilling time water loss, depth of weathering in 0' equivalents)
22			LIMESTONE (Cont.)			Pull 5 (Cont.)
23			Horizontal Open Joints Stained Brown	Rec 61%	Box 3 OF 4 Boxes	RQD $\frac{3'6"}{6'7"} = 53\%$ W.L. In Hole After Run 19.0'
24				RQD 53%	(Cont.)	
25			Fresh, Irregular Break Near Horizontal			CD Tape 25.1 25.5
26				Rec 100%		Pull 6 25.5-29.0
27			Fresh Break Along Silty Parting	RQD 100%	27.0	Ran 3.5 Rec 3.9 Gain 0.4 Drl. Action Rough No D.W. Return Hyd. Press. 150 psi Drl. Time 40 min. W.L. -19.0' RQD $\frac{3'11"}{3'11"} = 100\%$
28				Box 4 OF 4 Boxes		
29			45° Joint, Tight, Smooth		4 CD 29.0	Pull 7 29.0-33.5
30				Rec 100%		Ran 4.5 Rec 4.5 Loss 0.0 Drl. Action Rough No D.W. Return Hyd. Press. 150 psi Drl. Time 70 min. W.L. 19.0'
31			Horizontal Fracture Irregular, Fresh	RQD 100%		RQD $\frac{4'6"}{4'6"} = 100\%$
32						Water Level 19.0' After 24 Hr.
33						
592.0			Bottom Of Hole			Top 33.5 33.5

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PROJECT
Taylorsville Dam

HOLE NO.
C-18

Figure D-7. (Sheet 3 of 3)